CLASSIFICATION SECRET SECRET

CENTRAL INTELLIGENCE AGENCY
INFORMATION FROM
FOREIGN DOCUMENTS OR RADIO BROADCASTS

REPORT
CD NO.

50X1-HUM

COUNTRY	USSR	DATE OF INFORMATION	1950
SUBJECT	Economic - Iron and steel		
HOW PUBLISHED	Daily newspapers	DATE DIST.	3 Nov 1950
WHERE PUBLISHED	USSR	NO. OF PAGES	6
DATE PUBLISHED	9-29 Aug 1950		
LANGUAGE	Russian	SUPPLEMENT TO REPORT NO.	

THIS IS UNEVALUATED INFORMATION

SOURCE Newspapers as indicated.

STEEL PLANTS FAIL TO MEET SHIPPING SCHEDULES; WINTER PREPARATIONS SLOW

(Numbers in parentheses refer to appended sources.)

In late August, problems facing the metallurgical industry included an industry-wide lag in winter preparations, failure of some plants to meet deliveries, and delays in wide-scale adoption of automatic equipment. On the other hand, individual plants and workers continued to exceed the new progressive norms and reported improvements in techniques and equipment.

An editorial in Pravda points out that apparently the lessons of last winter have not been learned in the metallurgical industry.

Last winter, the Chusovoy Metallurgical Plant experienced serious delays in operations because of a deficiency of ore and coke. The plant this year has made no preparations toward building up winter reserves of ore and particularly of coke. "Glavuralmet" (Main Administration of Ural Metallurgical Industry) and plant directors have made no move to correct this situation.

The same condition in winter preparations exists at the "Azovstal'" Plant in Stalino Oblast. Last year, the plant management failed to prepare the plant's storage areas for maintenance of winter reserves of raw materials and did not provide for normal operations in intraplant transport and hoisting machinery. As a result, this leading enterprise became one of the lagging ones. This year, too, the plant is not making any winter preparations. Repair and construction brigades have not yet started to ready the main shops, and the supply yards are in disorder.(1)

This year, ore output in the Krivoy Rog Basin has increased 36 percent over 1949.(2) However, throughout last winter, the basin failed to operate at a steady pace and in the first half of 1950 failed to deliver thousands of tons of ore to metallurgical plants in the South. Just recently, the basin has shown some improvement, but the rate of increase in ore output is still insufficient. To step up the output rate, all sectors of production should be prepared for operation in winter conditions.

CLASSIFICATION SECRET

STATE	X	NAVY	X	NSRB	DISTRIBUTION
ARMY	X	AIR	X	FBI	

SECRET

Two and a half months ago, the Ministry of the Metallurgical Industry published an order on preparation of enterprises for winter. The order provided for the construction, at a number of plants, of temporary enclosures for heating of freight, liable to freezing, in railroad cars. The deadline for construction of this enclosure at the Dnepropetrovsk Metallurgical Plant has been set at 1 September, but the plant has not yet begun the project. Having published the order, the ministry failed to follow it up with funds and plans.(1)

In Izvestiya, an editorial points out that laxity on the part of other ministries, too, is delaying winter preparations in the metallurgical industry.

Workers in the coal industry have pledged to assist metallurgical enterprises in building up reserves of coking coals. But the Donbass is not fully meeting this task, and the Ministry of the Coal Industry USSR is not taking sufficiently active measures to correct the situation. The "Sverdlovskugol'" Combine is lagging in meeting the plan for stripping work, which can lead to a great lag in mining coal for winter. In 1950, the Ministry of the Construction of Heavy Industry Enterprises USSR is scheduled to build a number of warehouses for metallurgical plants, but this work is also behind plan, resulting in serious impairment of preparation of these enterprises for winter operations.(3)

Another Izvestiya article reports on the progress of automatization of equipment in the metallurgical industry.

Four fifths of the pig iron and steel in the USSR is produced in automatic blast and open-hearth furnaces. The Ministry of the Metallurgical Industry has plants which produce automatic apparatus and installations and also has planning, assembly, and other organizations concerned with the problem of introducing automatization into production. Despite this fact, the work in these plants and organizations is not fully organized and does not encompass all phases of production. The ministry did not meet the 1949 plan for work on a number of important measures related to automatization and is not meeting the 1950 plan. The ministry has failed to introduce automatics into nonferrous metallurgy, the refractories, coke and coke by-products, and metal products industries on a sufficiently extensive scale. Automatics should be also used on a considerably wider scale in the mining industry. It is fully possible to automatize the receiving of ore in the surface of mines, concentration of ores, loading, and the removal of rock dumps. Automatization in these fields, however, has not been accomplished.

The first steps have been taken to supply consumers of automatically regulated machines and equipment with all the necessary automatic installations. Rolling mills and blooming mills, electric-steel smelting furnaces, and turbine air blowers are now being produced together with the automatic apparatus. New machines should have automatic control apparatus built in or accompanying them, but in the production of new machines this angle is often forgotten.(4)

An open letter from workers at the Kolomna Locomotive-Building Plant to plants supplying them with metal products reports serious complications which have occurred in the work due to the delays in shipment of metal supplies.

The Kolomna Plant has serious complaints against "Glavmetallosbyt" (Main Administration of the Sale of Metal and Metal Products) and Vasilenko, its head. In the first quarter 1950, "Glavmetallosbyt" was to send the plant 20 tons each of No 3 steel discs and 40 x 40 angles per month. The administration did not give out the order for all this material until February, with the result that the Kolomna Plant's output of locomotives in January and February was seriously disrupted.

The same thing happened in the third quarter. Instead of supplying 20 tons of the same angle in July and August as scheduled, the administration sent 20 tons in August alone. These examples are not unusual.

The plant has particularly grave grievances against "Azovstal'" (director, Kogan), which has not provided a regular shipment of axle steel, shipping only 6 percent of the planned amount. The Kolomna Plant thus could not meet an urgent order for axles for railroad transport.

The Metallurgical Plant in Stalino in the first quarter shipped only 25 percent of the spring steel ordered by the Kolomna Plant, and only 60 percent in the second quarter. The plant has not yet received its orders for July and August, with the result that assembly of locomotives has been disrupted. The plant has had to find supplies of spring steel at other plants and then import it by truck, thus increasing productions costs.

The Dnepropetrovsk Plant imeni Petrovskiy (director, Korobov) was scheduled to deliver boiler plate, but in July shipped only 6 tons out of a planned total of 68 tons. Each month, the Kolomna Plant's boilermakers are lagging behind because of the great delays in metal shipments.

Other metallurgical plants which continually fail to meet orders on time are the Sinarskiy Pipe Plant (director, Shorokhov) in Kamensk-Ural'skiy, Sverdlovsk Oblast, the Makeyevka Metallurgical Plant (director, Belobrov), the Tula Metallurgical Plant, and several other enterprises of the metallurgical industry. Minister Kuz'min's attention is brought to the fact not only of shipping delays but also in many cases, the unsatisfactory quality of the product. The boiler plate of the Plant imeni Petrovskiy is of poor quality while that of the Nizhne-Tagil'skiy Plant is of much better quality.(5)

Among the achievements of individual plants and workers, it is reported from the Plant imeni Dzerzhinskiy in Dneprodzerzhinsk that the workers there have achieved the best coefficients in the Ukraine. The plant's workers have also made many radical improvements in the technology of steel and pig-iron smelting and rolled metal production, working with engineers and scientific institutes. New methods of regulating furnace operation and of correcting the charge for loss of blast-furnace dust in the blast-furnace shop have been successfully adopted. The durability of open-hearth furnaces has been increased and the furnaces' operation intensified.

The quality of chromomagnesite brick, recently reported as very low, has been improved as the result of the appointment of Engineer Biliznyukov, Laureate of the Stalin Prize, as the head of the refractories shop.

The problem of effective utilization of blast-furnace and coke-oven gas has been solved. In the last 2 years, the plant has lost 19 million rubles in unutilized gas. At the same time, open hearth shop No 2 was producing gas in generators, consuming much coal in the process. The conversion from a triple gas mixture to a double has helped to make more effective use of coke and blast furnace gas and to save coal, thereby decreasing the cost of steel.

The coefficient for utilization of blast-furnace capacity for the plant as a whole was 0.84 for the first half of 1950. Blast-furnace operators, in their pledge to Stalin in June, had set a goal of 0.83 for coefficient of blast-furnace utilization. A new record has been set at furnace No 1, which was operated recently with a coefficient of 0.47, with 0.55 the usual daily coefficient.

A new method of regulating furnace operation has been put into effect in the blast-furnace shop, increasing furnace productivity by 8 percent. A new method of correcting the charge for loss of blast furnace dust is being used successfully, and the ore is being neutralized in an entirely new way.

The plant's steelworkers are obtaining 6.32 tons of steel per square meter of hearth, as compared with 5.29 in 1948, 3.65 in 1946, 3.31 in 1940, and 2.8 in 1935. Workers of open-hearth shop No 1, in their pledge to Stalin set a goal for steel production of 5.5 tons per square meter of hearth, and this pledge has been fulfilled. The mean progressive norms have been adopted. The length of each melt has been decreased 0.3 hours more than planned.

Some of the workers, after a trip to the Moscow "Serp i molot" Plant, have been attempting to equal the records of leading Stakhanovites at the Moscow plant. There, leading workers usually complete a melt in 5 hours, obtaining 9 tons of steel per square meter of hearth. The secret of their achievement is in the new method of forcing the melt. The Moscow plant, instead of using limestone, charges roasted lime into the furnace, cutting the melting period by 20 minutes. Some of the workers in shop No 1 of the Plant imeni Dzerzhinskiy tried this method and completed the melt in only 5 hours. But the roasted lime had to be obtained far from the plant's limits. At the Moscow plant, fine scrap is pressed into one-ton fagots. This method has not yet been adopted at the Plant imeni Dzerzhinskiy and could cut the melting period by 40 minutes if adopted. The shop's average production is 5.5 tons per square meter, with the leading worker setting the pace with 6.69 tons.

The plant's metallurgical-furnace repair shop (chief, R. Shloma) completes cold repairs on open-hearth furnaces in 84 hours instead of the planned 144 hours. In comparison, the Dnepropetrovsk Plant imeni Petrovskiy takes 140 hours to complete cold repairs on a furnace similar in volume. The Dzerzhinskiy Plant's repair shop has cut in half idleness of furnaces for cold repairs.

The key to the shop's success is that it employs industrial work methods, works over a wide area, and has maximum mechanization of operations. It practices replacement of some parts of the furnace without first cooling them, or, in other words, endeavors to do more hot repair than cold, thus cutting down the time consumed in cold repair. In its high-speed repair jobs, the shop uses 30 different mechanisms, run by 20 electric motors.

The Dzerzhinskiy Plant's rolling mill operators are now producing twice as much metal per hot hour than in 1935. An operator of the plant's universal mill has developed a new technology for rolling universal bar, and this new method has been adopted in the iron-rolling shop. Until recently, the shop had rolled 35 x 35 and 40 x 40 angles and No 5 beams usually with seven passes through the rolls, It was proposed to increase the reduction and in this way cut down on the number of passes. Engineers were called in to put this proposal into effect. Now, the shop rolls these profiles in five passes, increasing its production of beams 100 percent and of angles 25-30 percent. Consumption of rollers has been cut by one third and the quality of the product has improved. The shop has also introduced hardening of the rollers, thereby tripling their durability. Formerly, the rollers had to be changed two or three times per shift, taking 1½ hours to

complete the change. Now these same rollers operate for an entire shift and sometimes for six or seven shifts in a row for certain profiles. The plant's section-rolling shop has also adopted the method of hardening the rollers, which was first advanced by Engineer Malyy, the plant's chief roller.(6)

The Plant imeni Petrovskiy in Dnepropetrovsk has been making advances in the field of introducing automatic control of equipment, thereby modernizing many old furnaces. Open-hearth furnace No 10 recently underwent capital repair during which time several structural changes were made in the furnace to enable it to be operated at higher temperatures. All furnaces of this shop have been renovated during capital repair jobs. Complete automatization of the heating systems was achieved, chromomagnesite roofs put in, and the work of the shop's casting area and supply yard was mechanized. As a result, furnaces built during the first Five-Year Plan have not became outmoded even after 20 years of operation. Their hourly productivity has increased from 10 tons of steel to 21 tons.

Other shops in the plant are also steadily improving the design of their machines and equipment. Rolling mill No 5 in the section-rolling shop was basically rebuilt during capital repair. An automatic apparatus now feeds the ingots from the soaking pits and a roller approach table conveys them to the trains of the mill. The operators are now working, together with scientists of the Dnepropetrovsk Metallurgical Institute, on complete automatization of the mill. The mill's prewar productivity indexes have already been doubled, and the mill is now rolling the most complex profiles.

Blast furnaces have also been renovated. The useful capacity of the furnaces has been increased and the blow is automatically regulated. As a result, one shift now smelts as much pig iron as formerly was smelted in one 24-hour period. Other plants are beginning to follow the example of the Plant imeni Petrovskiy in making basic renovations of equipment during capital repair jobs.(7)

Steelworkers of the plant's open-hearth shop No 3, on 8 August, succeeded in meeting their pledge to exceed the new progressive norms by 1½ times for steel output per square meter of hearth. The average for the shop is 9.1 tons as compared with the progressive norm of 6 tons.(8)

A steelworker at the "Zaporozhstal'" Plant recently set a new record, completing a melt in 7 hours and obtaining 9.66 tons of steel per square meter of hearth, exceeding his pledge by almost 100 percent. His average steel production for 20 days of August was higher than 7 tons per square meter.(7)

Operators of blast furnace No 3, Makeyevka Plant imeni Kirov in Stalino Oblast, have made a new record by obtaining one ton of pig iron per 0.77 cubic meters of blast furnace capacity, thereby producing nearly 100 tons above plan. The operators have been working at this high level throughout August.(2)

Labor productivity at the Beloretsk Steel Wire Plant, Bashkir ASSR, is now 11.2 percent above the 1949 level and production costs have decreased 23 percent. Workers in the open-hearth shop of the metallurgical combine are increasing the number of high-speed melts.(9)

Open-hearth workers at furnace No 7 of the Zlatoust Metallurgical Plant, Chelyabinsk Oblast, have attained a production of 6.3 tons of steel per square meter of hearth, as compared with the norm of 5.96 tons.(10)

In the last 7 months, the blast-furnace shop of the Novo-Tagil'skiy Metallurgical Plant in Nizhniy Tagil produced more metal than in all of 1949.(11)

In the Latvian SSR, steelworkers at the Liyepaya "Krasnyy metallurg" Plant have increased the length of the open-hearth furnace run from the norm of 280 melts of 400.(12)

SOURCES

1. Pravda, 29 Aug 50
2. Krasnaya Zvezda, 26 Aug 50
3. Izvestiya, 24 Aug 50
4. Izvestiya, 19 Aug 50
5. Trud, 20 Aug 50
6. Pravda Ukrainy, 25 Aug 50
7. Leningradskaya Pravda, 24 Aug 50
8. Trud, 9 Aug 50
9. Izvestiya, 25 Aug 50
10. Leningradskaya Pravda, 25 Aug 50
11. Pravda, 28 Aug 50
12. Sovetskaya Latviya, 29 Aug 50

- E N D -